

Ed 1/15/93 This is a #22
CONTROLLED DOCUMENT
EG&G - ROCKY FLATS PLANT
ENVIRONMENTAL MANAGEMENT

This is a RED Stamp

**ROCKY FLATS PLANT
EMD OPERATING
PROCEDURES MANUAL**

Manual No.: 5-21000-OPS-FO
Procedure No.: Table of Contents, Rev 40
Page: 1 of 3
Effective Date: 01/12/93
Organization: Environmental Management

THIS IS ONE VOLUME OF A SIX VOLUME SET WHICH INCLUDES:

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VOLUME II: GROUNDWATER (GW)
VOLUME III: GEOTECHNICAL (GT)
VOLUME IV: SURFACE WATER (SW)
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**DOCUMENT CLASSIFICATION REVIEW WAIVER
PER R.B. HOFFMAN, CLASSIFICATION OFFICE
JUNE 11, 1991**

ADMIN RECORD

A-SW-000514

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DCN 92.04	Clarification of Drill Cuttings	2	06/04/92
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DCN 92.07	Elimination of Drilling Requirements on Earthen Dams	2	09/10/92
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DCN 92.01	Chain of Custody	2	07/27/92
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FO.14	Field Data Management	2	05/12/92
DCN 92.01	Update Bottle Codes and Lab Codes to Current Status	2	06/30/92
DCN 92.02	Clarification of Biological Locations (07/08/92- Extended)	2	11/20/92
DCN 92.03	Changes in Procedures (07/08/92 - Extended)	2	11/20/92

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FO.14 (continued)			
DCN 92.04	Expired	2	10/15/92
DCN 92.05	Update QA/QC Code List	2	09/28/92
DCN 92.06	Clarify Description	2	09/28/92
DCN 92.07	Update Bottle Code List	2	09/28/92
DCN 92.08	Add Sub-Contractor Abbreviations	2	10/14/92
DCN 92.09	Major Form Revision	2	11/03/92
DCN 92.10	Elimination of Non-Required Section	2	11/10/92
DCN 92.11	Update Bottle Code & Lab Codes to Current Status	2	12/09/92
FO.15	Photoionization Detectors (PIDs) and Flame Ionization Detectors (FIDs)	2	05/12/92
FO.16	Field Radiological Measurements	2	05/12/92
DCN 92.04	Expired	1	09/22/92
DCN 92.05	Addition of HPGe	2	11/24/92
FO.17	Determining Out-Of-Specification Analytical Results for Environmental Samples		To Be Added
FO.18	Environmental Sample Radioactivity Content Screening	1	05/12/92
*DCN 93.01	Clarification of Procedure	1	01/11/93
FO.19	Base Laboratory Work	2	05/12/92

This is a RED Stamp
 Procedure Number 5-21000-OPS-FO.18, Rev 2
 11/12/92

Title Environmental Sample Radioactivity Content Screening	Date 11/11/92 MCB 1-11-93	DCN Number 93.01
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Expires 11/11/93 MCB
1-11-94 Procedure Revision Required ☒ Yes ☐ No

Scope Limitation: None

Item Number	Page	Step or Paragraph	Changes (Use DCN CONTINUATION SHEET for additional space)
NOTE: Underlined portions of these changes are revised text.			
1.	2	Sec. 2, Para. 1	Revise opening sentence of the purpose to read: "This procedure is intended to ensure that the samples (<u>including screening aliquots</u>) collected as part of the Environmental Management (EM) Division activities are ..."
2.	3	Figure	Delete reference to flowchart and delete flowchart.
3.	5	Sec. 6, Para. 1, 2	Revise the two opening paragraphs to read as follows: "Samples (<u>including screens</u>) with total activity $\geq 0.002 \mu\text{Ci/g}$ must be shipped as <u>Radioactive Material and in compliance with applicable EG&G procedures (e.g., 4-21000-OPS-FO.25, Shipping Limit Quantities of Radioactive Material In Samples, once issued), the EG&G RFP Transportation Manual, and the applicable health and safety plan(s).</u> <u>Environmental samples are considered non-radioactive if historical data and field data (e.g., field surveys) indicate they are non-radioactive or if the data from screening samples indicates they are non-radioactive. Note that the definition of non-radioactive for shipping is $\leq 0.002 \mu\text{Ci/g}$; however, other regulatory limits also apply in making this determination relative to the use of licensed versus unlicensed laboratories. continued on page 2.</u>

Justification (Reason for change - Provide numbers to reference corresponding items above.)

The procedure has been cited in several inspection reports as being difficult for the field personnel to understand and follow.

The left side of Figure FO.18-1 directs personnel to violate DOT regulations and it is not clear if it assures we meet the licensing criteria for the laboratory.

A shipment was made under this procedure that violated DOT requirements and resulted in the reporting of an "Off-Normal" event to DOE. Although this action violated the requirements of this procedure, a review of the actions indicates that a misinterpretation of this procedure was a contributor to this error. Part of the corrective action for this event is the issuance of this DCN and the eventual revision of the procedure.

Concurrence	Organization	Req.	Date	Concurrence	Organization	Req.	Date
<i>[Signature]</i>	QAPM	X	12/10/92	<i>[Signature]</i>	User		12/14/92
<i>[Signature]</i>	Rad Eng.	X	12/16/92	<i>[Signature]</i>	IH		1/7/93
<i>[Signature]</i>	EG&G Safety	X	1-8-93				
				<i>[Signature]</i>	FOM		1-8-93
Approval of Responsible Manager <i>[Signature]</i>	Date 12-14-92	Is Posting required? <input type="checkbox"/> Yes <input type="checkbox"/> No	If Yes, by what date? Upon receipt	Date posted			

DOCUMENT CHANGE NOTICE (DCN)
(Continuation Sheet)

Page 2 of 2
DCN No. _____

Procedure No. 5-21000-OPS-FO.18		Title Environmental Sample Radioactivity Content Screening	
Scope Limitation:			
Item Number	Page	Step or Paragraph	Changes (Use DCN CONTINUATION SHEET for additional space)
4.	7	Sec. 7.2.1, Para. 1	<p>Add the following bullet to the list for samples requiring prescreening:</p> <ul style="list-style-type: none"> o <u>Samples that actual (e.g., field survey data) or historical data indicates may contain radioactivity in excess of applicable limits.</u> <p>Revise the 4th bullet in samples not requiring screening to read:</p> <ul style="list-style-type: none"> o <u>Environmental samples including soil, sediments, and water from the environs outside of RFP's controlled areas, unless the information above indicates that the material may be radioactive.</u>
5.	8	Sec. 7.2.1, Top of page	<p>Add the following caution to the top of this page:</p> <p align="center"><u>CAUTION</u></p> <p><u>Any off-site shipment of samples, which may contain radioactive material (as discussed previously in this section) shall be screened on site by equipment with sufficient capability to verify if its activity concentration is above 0.002 μCi/g and to determine the appropriate shipping requirements.</u></p>
		Last para. on page	<p>Add the following information to the last paragraph on page 8:</p> <p><u>Shipment shall comply with 49 CFR 173.421 or other applicable section of 49 CFR.</u></p>
6.	11	Sec. 7.2.1, Last para.	<p>Revise this paragraph to read as follows: Irrespective of the requirements listed above, the Laboratory's Radiation Officer has <u>the authority to require additional screening</u> prior to shipment to that lab.</p>
7.	11	Sec. 7.2.2, Para. 2	<p>Add the following clarification to the end of the second paragraph:</p> <p><u>Note, in all cases (including samples sent to licensed laboratories) the screening method shall be capable of detecting activities of 0.002 μCi/g. The Program Chemist may designate specific methodology options for this screening, as long as they are appropriately documented and have the required detection capability.</u></p>
8.	8	Sec. 7.2.1	<p>Delete the first 3 paragraphs addressing the 150 DPM screening. Replace this with the following requirement <u>Screen the samples to assure that they the samples meet the screening criteria established by the laboratory.</u></p>
9.	13	7.2.3	<p>Replace the "Total Specific Activity > 0.002 μCi/g" with "<u>Total Specific Activity < 0.002 μCi/g</u>" to correct the typo.</p>
Justification Continuation			